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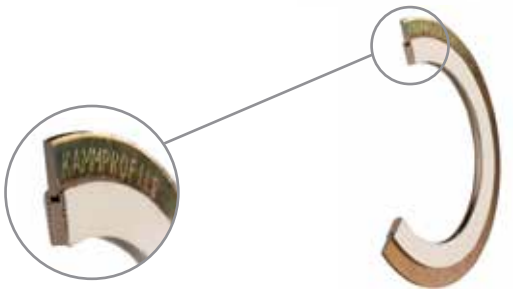
THERMa-PUR™ Style 4122

THERMa-PUR™ is a proprietary new gasketing material designed for use in high temperature sealing applications. It is produced using an environmentally friendly solvent-free process and combines a unique formulation with a patent-pending fiber core. THERMa-PUR™ is yet another innovative Garlock Sealing Technologies sealing solution that provides more than just temperature resistance.



Cut Gaskets (4122-FC)


Corrugated Metal Gasket (4122-CMG)



Kammprofile (4122-KAMM)

VALUE & BENEFITS

- Extreme Temperature Able to withstand high temperature, whether continuous or in thermal cycling conditions
- Oxidation Resistance Contains proprietary materials that provide improved weight loss characteristics over other high temperature solutions. (see graph)
- Hydrophobic & Electrically Insulating Resists water and provides electrical isolation thus reducing the possibility of corrosion between flanges made of dissimilar metals
- Easy Release from Flanges Does not stick to flanges making removal of gaskets easy and fast
- Safer Handling Patent-pending fiber core makes gaskets safer to handle when compared to traditional high temperature gaskets with steel cores

IDEAL FOR

- Marine and Land-based Exhaust Systems
- Biomass Gasification Process
- Oil and Gas Production
- Mineral and Fertilizer Processing
- Incineration Process
- Co-generation Systems
- Turbochargers Equipment
- Process Drying Equipment

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THERMa-PUR™ EXTREME TEMPERATURE GASKETING

TYPICAL PHYSICAL PROPERTIES

Temperature	Continuous max.	+1832°F (1000°C)
Pressure[1] psig (bar)	4122-FC	500 (34.5)
	4122-CMG	1000 (68.9)
	4122-KAMM	Equal to flange rating
P x T, max.[2] psig x °F (bar x °F)	4122-FC	150,000 (5,100)
	4122-CMG	600,000 (21,500)
	4122-KAMM	Equal to flange rating

Typical Physical Properties for 4122-FC*:

ASTM Test Method F36	
Compressibility, range, %	35-45
Recovery %	18
ASTM F38	
Creep Relaxation, %	25
ASTM F152	
Tensile, w/insert, psi (N/mm²)	1,200 (8.3)
ASTM F1315	
Density, lbs./ft³ (grams/cm³)	85 (1.36)
ASTM D149	
Dielectric Properties, volts/mil.	100

NOTES:

1. Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult Garlock Engineering.

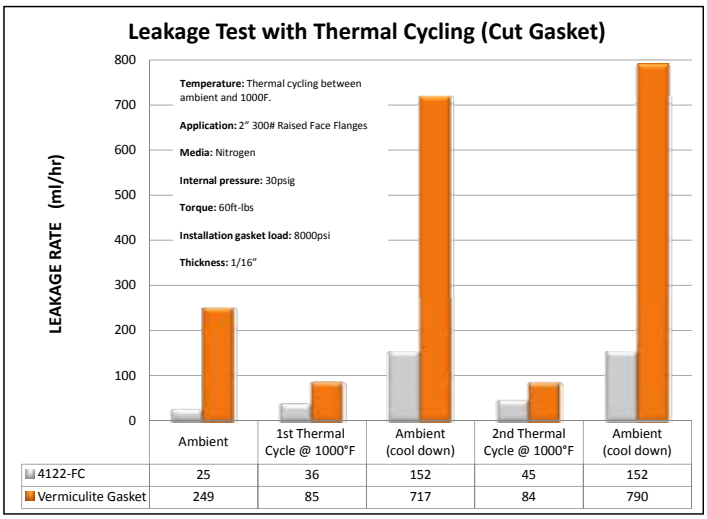
2. PxT = psig x ºF (bar x ºC)

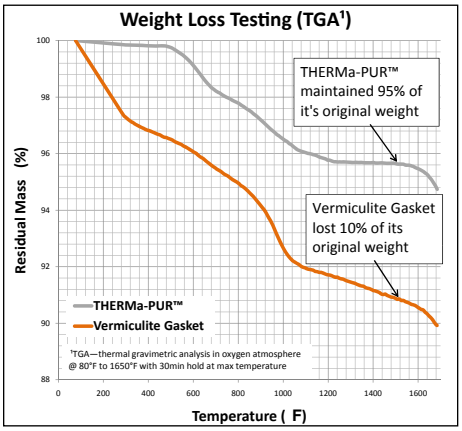
* This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties based on 1/16" (1.6mm) gasket thickness unless otherwise mentioned.

OUT PERFORMS

THERMa-PUR™ outperformed vermiculite based gaskets in laboratory testing†. THERMa-PUR™ showed significantly less leakage even in extreme thermal cycling condition

†For test details, please contact Garlock Engineering





LOW WEIGHT LOSS

THERMa-PUR™ proprietary formulation resists oxidation and has improved weight loss property by almost 2X when compared to other high temp organic based gaskets such as graphite and vermiculite

